

L Number	Hits	Search Text	DB	Time stamp
1	2	6493097.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 10:41
2	4479	polariz\$4 near3 chang\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 10:42
3	0	6493097.pn. and (polariz\$4 near3 chang\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 10:42
4	9080	TIR or (total near3 internal near3 reflect\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 10:43
5	184	(polariz\$4 near3 chang\$4) and (TIR or (total near3 internal near3 reflect\$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 10:43

DERWENT-ACC-NO: 2003-067645  
DERWENT-WEEK: 200306  
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TITLE: Imaging apparatus, for detecting biological agents or chemical substances, has polarization sensitive two-dimensional array detector, to detect spatially distributed polarization change of specimen irradiated with polarized light

INVENTOR: KEMPEN, L U

PATENT-ASSIGNEE: MAVEN TECHNOLOGIES  
LLC [MAVEN]

PRIORITY-DATA: 2002US-0838700 (January 12, 2002) , 2001US-0838700 (April 19, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE
LANGUAGE	PAGES
WO 200286468	October 31, 2002
E	019
A1	G01N 021/17

DESIGNATED-STATES: AE AG AL AU BA BB BG BR  
BZ CA CN CR CU CZ DM DZ EE GD GE HR H  
U ID IL IN IS JP KP KR LC LK LR LT LV MA MG  
MK MN MX NO NZ PL RO SG SI SK SL TR

TT UA US UZ VN YU ZW AT BE CH CY DE DK EA ES  
FI FR GB GH GM GR IE IT KE LS LU MC  
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR
APPL-NO	APPL-DATE
WO	N/A
2002WO-US02662	January 27, 2002
200286468A1	

INT-CL (IPC): G01J004/00; G01N021/17

RELATED-ACC-NO: 2002-433912;2002-730996

ABSTRACTED-PUB-NO: WO 200286468A

BASIC-ABSTRACT: NOVELTY - A polarized light source (12) radiates polarized light onto a specimen within the evanescent field associated with the total internal reflection (TIR) of a TIR surface (14). A polarization sensitive two-dimensional array detector (16) detects the light beam reflected from the TIR surface along with spatially distributed polarization change caused by the specimen.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for;

(1) chemical specimen array imaging method;  
and

(2) two-dimensional distributed chemical

specimen array characterization  
method.

USE - For detecting the presence,  
composition, quantity and spatial  
distribution of substances, such as  
biological agents or chemical substances.

ADVANTAGE - The detector detects the  
spatially distributed polarization change  
in the specimen, the characteristics of the  
specimen is determined accurately  
without the need for attaching fluorescent  
markers or other molecular tags to  
the substances.

DESCRIPTION OF DRAWING(S) - The figure shows  
the block diagram of the imaging  
apparatus.

Light source 12

TIR surface 14

Polarization sensitive two-dimensional array  
detector 16

CHOSEN-DRAWING: Dwg.1/5

TITLE-TERMS:

IMAGE APPARATUS DETECT BIOLOGICAL AGENT  
CHEMICAL SUBSTANCE POLARISE SENSITIVE  
TWO DIMENSION ARRAY DETECT DETECT SPACE  
DISTRIBUTE POLARISE CHANGE SPECIMEN  
IRRADIATE POLARISE LIGHT

DERWENT-CLASS: B04 D16 J04 S03

CPI-CODES: B11-C08; B11-C08B; B12-K04;  
D05-H09; J04-C02;

EPI-CODES: S03-E04B5;

CHEMICAL-CODES:

Chemical Indexing M6 \*01\*

Fragmentation Code

M905 Q233 Q435 R501 R515 R533 R639

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers:

C2003-017721

Non-CPI Secondary Accession Numbers:

N2003-052463